

## ABSTRACT

A wavelength-determining unit (20) for determining the wavelengths of a plurality of successive optical signals  $\lambda(t)$  comprises a wavemeter unit (30) for determining first wavelength values  $\lambda_1(t)$  for the optical signals  $\lambda(t)$ . An absolute-measuring unit (40) having unambiguous wavelength properties at known absolute wavelength values determines second wavelength values  $\lambda_2(t)$  as such of the known absolute wavelength values covered by the optical signals  $\lambda(t)$ . An evaluation unit (50) receives the determined first  $\lambda_1(t)$  and second  $\lambda_2(t)$  wavelength values and for provides corrected wavelength values  $\lambda_1'(t)$  based on a comparison of the determined first  $\lambda_1(t)$  and second  $\lambda_2(t)$  wavelength values.

[Fig. 1 for publication]

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